IN THE CLAIMS

1. A wireless signal receiver, comprising:

two or more receiver chains having spatially diverse antennas for receiving a transmitted signal and providing two or more receiver chain signals, respectively;

two or more channel estimators using said two or more receiver chain signals for estimating two or more sets of channel impulse response coefficients, respectively; and

a multichannel combined timer using said two or more sets of said channel coefficients for determining a multichannel combined symbol timing marker for synchronizing received symbols jointly for said two of more receiver chain signals.

2. The receiver of claim 1, further comprising:

an equalizer for jointly equalizing said synchronized received symbols for said two of more receiver chain signals for providing equalized symbols for said transmitted signal.

3. The receiver of claim 1, wherein:

the multichannel combined timer includes a multichannel combiner for combining channel response energies corresponding to said channel coefficients, respectively, in said two or more sets for index ranges of said channel coefficients into a series of multichannel combined metrics having a corresponding series of index cursors, said multichannel combined metrics used for identifying one of said index cursors as said symbol timing marker.

4. The receiver of claim 3, wherein:

the multichannel combined timer further includes a metric comparator for determining said symbol timing marker as a one of said index cursors associated with a largest one of said multichannel combined metrics.

5. The receiver of claim 3, wherein:

the multichannel combiner includes scalers for weighting said channel response energies of said two or more sets of said channel coefficients with two or more scale factors, respectively, for providing scaled said channel response energies, the multichannel combiner combining said scaled channel response energies for determining said multichannel combined metrics.

6. The receiver of claim 5, further including:

two or more noise estimators for determining two or more noise levels from said two or more receiver chain signals, respectively; wherein said scale factors are inversely dependent on said noise levels, respectively.

7. The receiver of claim 3, wherein:

said channel coefficients have associated impulse response indexes from a first index to a last index for profiling delay spreads for two or more signal channels for said transmitted signal received by said two or more receiver chains, respectively; and said index cursors correspond to said impulse response indexes in a cursor range from said first index to an equalizer index span less than said last index.

8. The receiver of claim 7, wherein:

the multichannel combiner determines said series of said multichannel combined metrics by combining said channel response energies for said impulse response indexes in said index ranges equal to said equalizer index span starting at said index cursors for said series of said index cursors, respectively.

9. The receiver of claim 7, wherein:

the multichannel combiner determines said series of said multichannel combined metrics by inversely scaling a sum of said channel response energies corresponding to a particular one of said index cursors by a sum of an initial precursor term plus a sum of said channel response energies at said impulse response indexes for

said index ranges from said first index to one less than said particular index cursor for said series of said index cursors, respectively.

10. The receiver of claim 7, wherein:

the multichannel combiner determines said series of multichannel combined metrics by inversely scaling a sum of said channel response energies for said impulse response indexes for said index ranges equal to said equalizer index span starting at particular said index cursors in said series of said index cursors by a sum of an initial precursor term plus a sum of said channel response energies at said impulse response indexes for said index ranges from said first index to one less than said particular index cursors for said series of said index cursors, respectively.

11. The receiver of claim 7, wherein:

said impulse response indexes have at least two phases;

the two or more channel estimators provide each of said two or more sets of said channel coefficients at each of said least two phases for providing phased said channel coefficients;

the multichannel combiner combines said channel response energies for said two or more sets of said phased channel coefficients for determining phased said multichannel combined metrics; and

the metric comparator issues said symbol timing marker corresponding to a one of said index cursors associated with a largest one of said phased multichannel combined metrics.

12. A method for receiving a wireless signal, comprising:

receiving a transmitted signal in two or more receiver chains having spatially diverse antennas for providing two or more receiver chain signals, respectively;

estimating two or more sets of channel impulse response coefficients from said two or more receiver chain signals, respectively; and

determining a multichannel combined symbol timing marker from said two or more sets of said channel coefficients for synchronizing received symbols jointly for said two of more receiver chain signals.

13. The method of claim 12, further comprising:

equalizing said synchronized received symbols jointly for said two of more receiver chain signals for providing equalized symbols for said transmitted signal.

14. The method of claim 12, wherein:

determining said multichannel combined symbol timing marker includes combining channel response energies corresponding to said channel coefficients, respectively, in said two or more sets for index ranges of said channel coefficients into a series of multichannel combined metrics having a corresponding series of index cursors for designating equalizer index spans of said channel coefficients, said multichannel combined metrics used for identifying one of said index cursors as said symbol timing marker.

15. The method of claim 14, wherein:

determining said multichannel combined symbol timing marker includes determining a largest one of said multichannel combined metrics and using a one of said index cursors associated with said largest one of said multichannel combined metrics as said symbol timing marker.

16. The method of claim 14, wherein:

combining said channel response energies includes weighting said channel response energies of said two or more sets of said channel coefficients with two or more scale factors, respectively, for providing scaled said channel response energies; and combining said scaled channel response energies for determining said multichannel combined metrics.

17. The method of claim 16, further comprising:

determining two or more noise levels for said two or more receiver chain signals, respectively; and

calculating said scale factors as inversely dependent on said noise levels, respectively.

18. The method of claim 14, wherein:

said channel coefficients have associated impulse response indexes from a first index to a last index for profiling delay spreads for two or more signal channels for said transmitted signal received by said two or more receiver chains, respectively; and said index cursors correspond to said impulse response indexes in a cursor range from said first index to an equalizer index span less than said last index.

19. The method of claim 18, wherein:

combining said channel response energies includes determining said series of said multichannel combined metrics by combining channel response energies for said impulse response indexes in said index ranges equal to said equalizer index span starting at said index cursors for said series of said index cursors, respectively.

20. The method of claim 18, wherein:

combining said channel response energies includes determining said series of said multichannel combined metrics by deemphasizing a sum of said channel response energies corresponding to a particular one of said index cursors by a sum of an initial precursor term plus a sum of said channel response energies at said impulse response indexes for said index ranges from said first index to one less than said particular index cursor for said series of said index cursors, respectively.

21. The method of claim 18, wherein:

combining said channel response energies includes determining said series of multichannel combined metrics by deemphasizing a sum of said channel response energies for said impulse response indexes for said index ranges equal to said equalizer index span starting at particular said index cursors in said series of said index cursors by a

sum of an initial precursor term plus a sum of said channel response energies at said impulse response indexes for said index ranges from said first index to one less than said particular index cursors for said series of said index cursors, respectively.

22. The method of claim 18, wherein:

said impulse response indexes have at least two phases;

estimating said two or more sets of said channel impulse response coefficients includes estimating said two or more sets of said channel coefficients at each of said least two phases for providing phased said channel coefficients;

combining said channel response energies includes combining said channel response energies for said two or more sets of said phased channel coefficients for determining phased said multichannel combined metrics; and

determining a multichannel combined symbol timing marker includes determining said symbol timing marker corresponding to a one of said cursors associated with a largest one of said phased multichannel combined metrics.